

TIMES AND TRAILS

People, Projects and Priorities at Environment and Conservation

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September 2005

In Vision

Environment and Conservation employees:

Good things are happening for conservation in Tennessee. I recently joined Governor Bredesen at Burgess Falls State Park for the signing of the Tennessee Heritage Conservation Trust Fund Act of 2005. It was great to be there on a sunny September morning with the governor, parks staff, local residents and conservation leaders from across the state. This new trust fund is an important addition to Tennessee's land conservation toolbox. Our state will now have greater capacity in responding to emerging conservation opportunities and more ability to design creative land preservation strategies. I look forward to working with the 11 board members that will lead this new trust fund. I believe this new trust fund and its board will produce real dividends for the protection of Tennessee's special places.



Commissioner Jim Fyke

I was glad the Governor chose to sign this new law into effect at Burgess Falls State Park – between Cookeville and Sparta. Earlier this year participants at the Governor's Land and Water Forum determined the Cumberland Plateau would be the first priority for the Heritage Conservation Trust Fund. The Cumberland Plateau is one of the most biodiverse regions in the United States – even richer in plant and animal species than its better-known cousin, the Blue Ridge Mountains. There is a strong desire to conserve and protect the natural resources that make the Plateau so distinct.

Because time is precious, I am encouraged by the work now underway to emphasize the importance and uniqueness of the Cumberland Plateau. The Alliance for the Cumberlands has been formed to strengthen both the economy and protect the environment on the Plateau. The region's university communities have also stepped forward to lead an innovative citizens' workshop called *Envisioning the Future of the Cumberland Plateau*. Sewanee, Tennessee Tech and the University of Tennessee are hosting a series of meetings that will culminate in a Plateau citizens' summit at Cumberland Mountain State Park on October 28.

I am proud to lead a department whose work supports public lands and enriches the lives of so many Tennesseans. Governor Bredesen proclaimed Saturday, September 24 as Public Lands Day in Tennessee. Our department sponsored a range of trailbuilding, maintenance and cleanup activities for volunteers at state parks and natural areas. This was a good reminder about the value of public lands and the civic ideal of shared stewardship that public lands represent. It is also a good time for me to say thanks to all our staff whose work contributes to the protection and improvement of public lands in our care. I hope each of you find a way to enjoy and celebrate Tennessee's public lands in the days ahead.

A handwritten signature in black ink that reads "Jim".

Division of Natural Heritage

Protecting Tennessee's Vast Biological Diversity

Times and Trails recently talked with Reggie Reeves, director of the Division of Natural Heritage.

Q: How long have you worked with the Division of Natural Heritage (DNH)?

I have been with the DNH since 1993 and with the department since 1979. I started out with the department as a seasonal naturalist at the Hiwassee State Scenic River in 1978, became a park ranger there in 1979 and transferred to Radnor Lake State Natural Area as a park ranger. In 1981, I was promoted to park manager at Long Hunter State Park where I worked until joining the DNH in 1993.

Q: In what direction do you see DNH moving and what are the division's goals for the future?

Limitations in staff and resources certainly challenge us, but our goal is to grow this program to a level of staffing and funding that can effectively support the work of the division in administering our statutory responsibilities. We have a strategic staffing plan to help guide this effort.

We are using the performance based budgeting (PBB) process to assist us in establishing our goals. The end result of the work for each program and its staff is the conservation of Tennessee's biological diversity. Through the PBB process we have quantified this end result into measurable and attainable goals.

For example, we are tracking the percentage of rare plant and animal species that are protected on state natural areas and scenic rivers, with a long-term goal of reaching 100%. As of June 30 this year, we have 27% of the state's rare plants and 16% of the state's rare animals protected. We are also targeting the conservation of Tennessee's natural communities. As of June 30 this year, 83% of the target ecoregions and 73% of the target watersheds are represented. Measuring and quantifying these targets is a fairly complex process, and we have needed to make some adjustments as we go along.

All of this is focused on our long-range goal: enhancing Tennessee's natural biological diversity by protecting at least one population of all Tennessee's rare plant and animal species, and at least one example of all Tennessee's ecoregions and one representative river in each watershed.

Q: Natural Heritage oversees three program areas. Would you tell us a little about all of them?

The **Natural Heritage Inventory Program** is the foundation of DNH. It is critical to driving the protection activities of the Natural Areas and Scenic Rivers Programs and the environmental review process used by nearly every state and federal agency in Tennessee plus private land managers. This program has a staff of 4 and works in cooperation with our parent program,

NatureServe, to maintain a database of the location and condition of "tracked" rare plant and animal species, ecologically significant sites, and conservation managed lands throughout Tennessee. This information is shared with other agencies and land managers for permitting and planning purposes. This program also determines the state rank of Tennessee's rare plants and animals, establishes the official state status of Tennessee's rare plants with assistance from our Scientific Advisory Committee, reviews and issues scientific collecting permits on state parks and natural areas, and reviews and issues rare plant nursery licenses in Tennessee.

The **Rare Plant Protection Program** has a staff of 2 and operates under a cooperative agreement between the State and the U.S. Fish and Wildlife Service (USFWS). This program is the lead state agency in the listing and recovery activities for federal listed plants in Tennessee. There are 21 federal listed plant species in Tennessee and 3 candidate species. This program receives approximately \$70,000 in grant funds from the USFWS annually to conduct inventory, management and research activities targeted at the recovery of federal listed plant species and has received approximately \$1,000,000 in federal Recovery Land Acquisition grant funds to conserve habitat for species of concern over the past 4 years.



Bays Mountain is a 3,000-acre natural area located only six miles from downtown Kingsport, Tennessee.

The Natural Areas and Scenic Rivers Program is responsible for the administration of the Tennessee Natural Areas Preservation Act of 1971 and the Tennessee Scenic Rivers Act of 1968. With a staff of 5 it has varying levels of responsibility for 69 designated state natural areas covering approximately 105,000 acres and 13 designated state scenic rivers covering approximately 390 river miles in Tennessee. This program has presence in three regional offices – Jackson EFO, the Nashville Central Office, and Knoxville EFO. Based on the work of the Natural Heritage Inventory Program, possible natural areas are strategically identified and evaluated throughout Tennessee. These sites are recommended to our Natural Areas Advisory Committee and then to the commissioner for consideration in the department's legislative package. Natural Areas are only created or expanded through an act of the General Assembly. The process for Scenic Rivers is very similar. Many of our natural areas are open to the public, with trails and interpretive information available, while access to others is limited due to their sensitive nature.

Q: Natural Heritage works closely with other state divisions, agencies and community groups. Would you expand on this a bit?

We also work with many other groups and agencies on conservation projects and initiatives throughout the state: The Conservation Fund, The North Chickamauga Creek Conservancy, The Wolf River Conservancy, the Friends of Short Springs, timber companies, industrial landowners, local governments plus other state and federal agencies. The DNH has collaborated with the Tennessee Nature Conservancy on a number of important conservation projects including the acquisition and protection of the nearly 850 acre Flat Rock Cedar Glade State Natural Area in Rutherford County.

Q: While protecting Tennessee's biodiversity is the division's mission, how do you balance opposing interests and the effects of urban sprawl and development?

As a science driven program, it is crucial that our staff remain focused on evidence and not be distracted by opinions or agendas of other organizations on either side of broader conservation issues. We work very closely with numerous local, state and federal agencies, as well as with the private sector and non-governmental organizations. These relationships require our objectivity. By staying focused on the science we can avoid being distracted by individual agendas. We certainly appreciate the rights of individuals or groups to voice their opinions about important environmental issues, but we simply can't join in.

Q: Is there anything else you would like to share?

DNH is excited about conservation in Tennessee today. With leadership from Governor Bredesen and his strong interest in conservation as reflected by the Heritage Conservation Act of 2005 and his previous work with the Land Trust for Tennessee, the potential for conservation in Tennessee has probably never been greater. We are truly working in extraordinary times. Agencies are now setting individual agendas aside and working together for the good of conservation. With the help of several very effective non-governmental organizations like TNC and the Conservation Fund, we hope to make the results of conservation efforts in Tennessee the envy of other states. That is exactly how it should be.



*Washmorgan Hollow is a 73-acre natural area in Jackson County. This rich hollow supports a large population of *Synandra hispidia*, which is the mint family, and uncommon in Tennessee.*



Cedars of Lebanon State Forest Natural Area is a 1,043-acre natural area in Wilson County and is part of the 9,420-acre Cedars of Lebanon State Forest. The natural area is part of the largest contiguous cedar glade-barren complex in public ownership and was one of the first natural areas designated in 1974.

In Step with Environment and Conservation Staff

What is your position at TDEC?

Zoologist (Environmental Specialist 3) in the Division of Natural Heritage.

What does that involve?

The primary purpose of this position is to coordinate accurate statewide data concerning sensitive animal species, reflective of current statutes, rules, and codes at the state and federal level.

How long have you worked at TDEC?

12 years and three months.

What is one thing your fellow employees don't know about you?

That I was born in a hospital rather than the hollow of a tree.

What is your favorite dessert?

Key lime pie

What do you enjoy most about working for the department?

What I enjoy most is the constant opportunity to learn about Tennessee's rare species and their habitats, and to hopefully contribute to their conservation. Though most of the animal species for which we manage data are virtual to us (e.g. the data come from external sources and not from direct observation), I do enjoy the field projects we undertake annually (primarily crayfish, land snails, and cave research). Working with so many different species or species groups allows the opportunity to collaborate with a myriad of specialists both inside and outside the department – truly a privilege for me. Just getting to know the always personable (and often quirky) folks who own rare species habitats is the icing on the cake!

If you could change one thing about TDEC, what would that be?

Every so many years we hear about the department creating a "technical career track" for non-supervisory technical employees. I believe this represents the department's best opportunity to train and retain highly motivated employees in scientific disciplines.

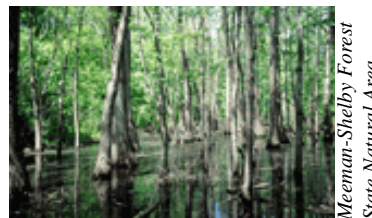


Dave Withers

Did you know...

Tennessee Biodiversity

- ◆ Tennessee is home to some of the most diverse forests in the temperate region of the world. Our forests contain more species of trees than all of Europe.
- ◆ Streams running through the forests of Tennessee's Cumberland Plateau are among the most biologically diverse temperate freshwater communities in the world.
- ◆ Tennessee has a larger number of endangered and threatened plants and animals than any other inland state.
- ◆ Tennessee's rivers and streams are home to a rich and diverse natural heritage including over three hundred species of fish, the most diverse collection of freshwater fish of any state in the U.S.
- ◆ Tennessee has more federally listed endangered species than 46 other states and, along with three other states, has the highest percentage of aquatic species at risk. Source www.tennesseeforests.com. Tennessee Forests Council



Meeman-Shelby Forest State Natural Area

Levan Gardener wins Chattanooga Environmental Education Alliance award

Levan Gardener, Booker T. Washington park manager, recently received one of two awards presented to local environmental educators by the Chattanooga Environmental Education Alliance (CEEA) for the Earth Day events he produced at Booker T. Washington State Park for the area's 4th grade students.

(L-R): Bekah Mason, Girl Scout Council; Elaine Hutcheson, Ooltewah Middle School; Kathy Daugherty, USDA-NRCS; Marcia Heath, CEEA Chair; Levan Gardener, Booker T. Washington State Park.



Governor Signs Heritage Conservation Act of 2005

Governor Phil Bredesen signed the Tennessee Heritage Conservation Trust Fund Act of 2005 on September 15. State and local elected officials, along with representatives from environmental groups across the state, showed their support by attending the signing ceremony at Burgess Falls State Natural Area.

The Heritage Conservation Trust Fund provides a mechanism for the state to work with other public and private partners for the preservation and protection of priority tracts across Tennessee.

"It's personally important to me to preserve land for the future of our state and the people of Tennessee," said Governor Bredesen. "Once it's gone, we can never go back to the wild spaces that are so much a part of Tennessee's landscape. The Heritage Conservation Trust Fund allows us to leverage our resources by partnering with other public and private groups who are seeking to achieve the same goals."

Governor Bredesen budgeted \$10 million for the Trust Fund this fiscal year, which was approved by the Tennessee General Assembly. The Act authorizes the Trust Fund to accept private donations and contributions and authorizes the Fund to establish a 501(c)(3) to assist in raising private donations for land conservation.

The Fund will be administered by the Department



State Representative Jere Hargrove, State Representative Charles Curtiss, State Representative Mike McDonald, State Senator Charlotte Burks and Commissioner Jim Fyke watch as Governor Bredesen signs the Heritage Conservation Trust Fund Act of 2005.

Department of Agriculture and the executive director of the Tennessee Wildlife Resources Agency will serve as ex-officio members of the board.

"The Heritage Conservation Trust Fund Act will go a long way to help us protect ecologically significant lands across Tennessee through acquisition, donation and easement activities," said Environment and Conservation Commissioner Jim Fyke. "We're thrilled to be at beautiful Burgess Falls today to celebrate this powerful new preservation tool."

Governor Bredesen and Commissioner Fyke were joined for the bill signing by the bill's sponsor, Representative Mike McDonald, and State Senator Charlotte Burks, State Representatives Charles Curtiss and Jere Hargrove.

"I'm extremely pleased to see this important piece of legislation signed into law," said Rep. McDonald. "The General Assembly felt it was important that we have a mechanism that allows us to move quickly to preserve and protect our natural resources in partnership with other organizations."

In addition to preserving and protecting land for the future enjoyment of



Governor Bredesen and State Senator Charlotte Burks are joined by Tennessee State Parks staff at Burgess Fall State Park.

of Environment and Conservation and will be run by an 11-member board of trustees, appointed by the governor in the near future, to represent all regions of the state. Each board member will serve a four-year term. The commissioners of Environment and Conservation, the

all Tennesseans, land conservation helps protect our air and water resources. The Heritage Conservation Trust Fund also serves to promote tourism and outdoor recreational activities such as hiking, fishing, hunting and equestrian activities.

National Heritage Corridors Possible in Tennessee

The Tennessee Department of Environment and Conservation has received a \$31,500 federal grant to develop and communicate the Cumberland Plateau Feasibility Study. The study is a required step toward making the Cumberland Plateau a National Heritage Corridor. Matching funds for this grant and additional funding will be provided by the Tennessee Wildlife Resources Agency, the Department of Transportation and Environment and Conservation. The state is working with a group of local stakeholders called the Alliance for the Cumberlands on this project.

The feasibility study began in March and will take twelve months to complete. It will inventory natural and cultural resources on the Plateau and provide a current economic impact assessment as well as potential for additional economic benefits as a result of the designation. The end goal is to develop plans for sustainable nature-based, heritage-based, agriculture-based and recreation-based opportunities while protecting and preserving the unique resources of the region.

If the Cumberland Plateau is designated a National Heritage Corridor, the federal government would contribute funds for its preservation, but would not own the land. Instead, the National Park Service, state government, local municipalities, businesses, nonprofit groups, private citizens and others would work through a developed mechanism to protect the Plateau's special identity and prepare for its future.

The Alliance for the Cumberlands is a partnership of public and private organizations unified in their commitment to protect the Cumberland Mountains and Plateau Region of Kentucky, Tennessee, Georgia, Alabama, West Virginia and Virginia.

For more information about the Alliance for the Cumberland and to read the *The Case for Federal Designation and Step One: The Feasibility/Suitability Study* go to: www.alliancefortheCumberlands.org

"The National Heritage Corridor project is a win-win situation that provides both sustainable economic development and conservation of the unique nature of the land, its people, and their history," said Katherine Medlock, Executive Director of the Alliance for the Cumberlands.

"The Cumberland Plateau Corridor is one of four regions of Tennessee targeted in the 2003-2008 Tennessee State Recreation Plan for designation under a Recreational Development Corridor plan," said Commissioner Jim Fyke. Other corridor regions are the Appalachian Mountain, the Tennessee River/Kentucky Lake, the Mississippi River and Middle Tennessee.

Plateau Offers Unique Scenic Diversity

The Cumberland Plateau's geology, with hard sandstone caprock overlaying soluble limestone, is distinctly different from other mountain ranges in the US. As a result, the Plateau has a greater diversity of scenic attractions than other mountains in the eastern United States.

- ◆ 122 natural bridges and stone arches, including 16 over 30 feet high and 4 over 60 feet high, most in public ownership.

- ◆ 22 chimney formations, including 14 over 20 feet high and one 200 feet high, most in public ownership.

- ◆ Hundreds of miles of sandstone cliffs up to 120 feet tall, including four of the finest rock climbing sites in the southeast.

- ◆ 164 waterfalls, including 39 over 50 feet and 10 over 100 feet.

- ◆ 280 caves, 21 which are described as "extensive", including Cumberland Caverns, Big Bone Cave, and Wonder Cave.

- ◆ 1200 miles of rivers and streams identified by the National Park Service as having "outstanding remarkable" nature or cultural values judged to be of national significance. The Plateau counties contain 45 out of a total of 100 Tennessee streams so classified by the National Park Service.

Source: Alliance for the Cumberlands

The official federal definition of a National Heritage Area is "a place designated by Congress where natural, cultural, historic and scenic resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography". There are now 23 federally designated Heritage Areas and Heritage Corridors in the US.

Governor Recognizes Importance of Public Lands in Tennessee



Governor Phil Bredesen proclaimed Saturday, September 24, 2005, Public Lands Day in Tennessee. The proclamation coincides with National Public Lands Day celebrations being held across the country.

"Tennessee's public lands are one of the treasures that make our state such a wonderful place to live," Bredesen said. "We are committed to protecting Tennessee's public places, and I encourage everyone to lend a hand to help conserve them for today's families and future generations."

National Public Lands Day is the nation's largest one-day, volunteer stewardship event. Organizers seek to honor the legacy of the Civilian Conservation Corps in protecting America's public lands. More than 90,000 volunteers are expected to work at 725 locations nationwide in 2005.

The department sponsored volunteer stewardship projects at Frozen Head State Park in Morgan County, South Cumberland State Recreation Area in Grundy County, Cheeks Bend State Natural Area in Maury County and Short Springs State Natural Area in Coffee County. The volunteer projects ranged from removing invasive plant species at South Cumberland's Savage Gulf State Natural Area to litter cleanup and trail building at other locations.

National Public Lands Day is coordinated by the National Environmental Education and Training Foundation and is sponsored by Toyota USA in partnership with numerous other federal, state and local agencies.

Out and About with the Commissioners

Environment and Conservation Partners with Middle Tennessee State University's WaterWorks! Program to Reduce Water Pollution



Commissioner Jim Fyke (right) presented a grant to Middle Tennessee State University President Sidney McPhee for expansion of MTSU's WaterWorks! Program. Joining in the celebratory event is the WaterWorks! catfish.



Paula Smith (left), Used Oil Program coordinator with Karen Hargrove, MTSU Center for Environmental Education director and Debbie Mann, grants and awards coordinator for the Office of Environmental Assistance.

More photos next page

The Tennessee Department of Environment and Conservation announced a new partnership with Middle Tennessee State University's Center for Environmental Education WaterWorks! program to reduce water pollution in Tennessee.

The department highlighted the partnership with a five-year, \$1,143,161 Used Oil grant to MTSU's WaterWorks! program at Bicentennial Capitol Mall State Park on September 7, 2005. The grant will allow WaterWorks! to expand its effective statewide outreach efforts regarding used oil recycling and responsible automotive fluid management.

"We all live downstream from someone," said Commissioner Jim Fyke. "This partnership with MTSU's WaterWorks! program will help our department share a more powerful water quality message while emphasizing the role every individual plays in protecting Tennessee's 60,000 miles of rivers and streams."

With the additional financial support from the Used Oil Fund, WaterWorks! will be able to dramatically increase the number and frequency of water pollution reduction messages distributed across Tennessee. This will help local stormwater programs in both large and small municipalities leverage their limited education resources to fulfill all or part of their public outreach commitments.

"Much of today is possible through the power of partnerships – partnerships between the university and government, business, and industry," said MTSU President Sidney McPhee. "When we work together – combining our expertise, resources, and shared vision – nothing is impossible."

"We need people to recognize that each individual can impact water quality by making small changes in their everyday habits," said Paula Smith, Used Oil Program coordinator for Environment and Conservation. "This grant will increase exposure to our messages about proper used oil handling and automotive fluid best management practices."

For more information: www.tdec.net/swm/oil. To report illegal dumping or other water quality problems, call your local environmental field office at 1-888-891-TDEC (8332).

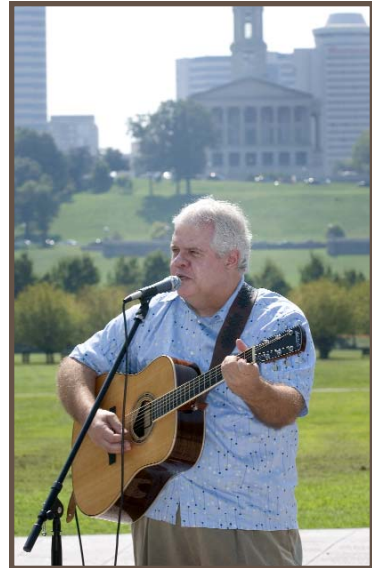
Department Celebrates Used Oil Partnership with MTSU's WaterWorks! Program



Commissioner Jim Fyke.



Paula Smith, Used Oil Program coordinator.



Recording artist Dan Tyler provided entertainment.



Middle Tennessee State University President Sidney McPhee (left) with Commissioner Jim Fyke.



Deputy Commissioner Paul Sloan remarks about clean water.



Left: Commissioner Jim Fyke, Karen Hargrove, Catfish, Sidney McPhee and Deputy Commissioner Paul Sloan.



Displays from the department's Used Oil Program, the Cumberland River Compact and Metro Water Services.

September Service Anniversaries

5 Years

Patrick Parker, General Counsel, Nashville
Davie White, Booker T. Washington State Park
Michael Chercourt, Norris Dam State Park
J. J. Perdue, Facilities Management, Nashville
Myra Norwood, Radiological Health, Knoxville EFO
James Clark, Solid Waste Management, Columbia EFO

10 Years

Glenda McCloud, Commissioner's Office
Tim Johnson, Roan Mountain State Park
Coy Gammon, Rock Island State Park
Tim Poole, Pinson Mounds State Park

15 Years

Hubie Stephens, Air Pollution Control, Nashville
Darlene Seagraves, DOE Oversight, Knoxville EFO
Walter Celusta, Ground Water Protection, Nashville EFO

John Clement, Ground Water Protection, Nashville EFO
James Williams, Ground Water Protection, Jackson EFO

20 Years

Becky Hawkins, Geology, Knoxville EFO
Steven Janes, BOE Administration, Nashville EFO
Mike McClelland, Water Pollution Control, Nashville
Dennis Graves, Underground Storage, Jackson EFO

25 Years

Kathy Mitchell, Water Pollution Control, Nashville
Cheryl White, Underground Storage, Nashville

30 Years

Bill Amonett, Fiscal Services, Nashville
Ila Smith, Fall Creek Falls State Park
Kenny Daniel, Cedars of Lebanon State Park
Danny Cotner, Pickwick Landing State Park

Correction: Charlette Watson is presently employed with the Department of Personnel, not Radiological Health as reported in the August Service Anniversaries.

Water Pollution Control and World Water Monitoring Day - Oct. 18, 2005

Deputy Commissioner Paul Sloan has asked Water Pollution Control to track volunteer water sampling for World Water Monitoring Day.

World Water Monitoring Day (WWMD), is a worldwide opportunity to positively impact the health of rivers, lakes, estuaries and other waterbodies. Volunteer monitoring groups, water quality agencies, students and the general public are invited to test four key indicators of water quality: temperature, pH, dissolved oxygen, and turbidity. Water sampling is done between September 18-October 18. Groups can register their waterbody and have the data published on the World Water Monitoring Day website. Kits are available but you can use your own sampling equipment if you have it.

For more information visit: www.worldwatermonitoringday.org/

Source: World Water Monitoring Day

Feeling left out?

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